Information Processing & Management Vol. 25, No. 6, pp. III-XII, 1989
Printed in Great Britain.

0306-4573/89 $3.00 + .00
Copyright © 1989 Pergamon Press plc

LIST OF CONTENTS

Vol. 25, No. 1, 1989

Special Issue: **Modeling Data, Information and Knowledge**

I. Introduction

Edward A. Fox 1 Research and development of information retrieval models and their application

F. N. Teskey 7 User models and world models for data, information and knowledge

II. Boolean-Based Models

Steven C. Cater
Donald H. Kraft 15 A generalization and clarification of the Waller-Kraft wish list

Caroline M. Eastman 27 Handling incrementally specified Boolean queries: A comparison of inverted and signature file organizations

III. Probabilistic Models

S. K. M. Wong
Y. Y. Yao 39 A probability distribution model for information retrieval

Norbert Fuhr 55 Models for retrieval with probabilistic indexing

IV. Artificial Intelligence Models

Susanne M. Humphrey 73 MedIndEx System: Medical Indexing Expert System

Marie-France Bruandet 89 Outline of a knowledge-base model for an intelligent information retrieval system

117 Announcement

I Software Survey Section

Vol. 25, No. 2, 1989

Lesley Trenner 119 A Comparative Survey of the Friendliness of Online *Help* in Interactive Information Retrieval Systems

Mark T. Maybury 137 Genny: A Knowledge-Based Text Generation System

Timo Raita
Jukka Teuhola 151 Predictive Encoding in Text Compression

Lorraine K.D. Cooper **Alan L. Tharp**	161	Inverted Signature Trees and Text Searching on CD-ROMS
Alan P. Parkes	171	The Prototype Cloris System: Describing, Retrieving and Discussing Videodisc Stills and Sequences
Stuart Weibel **Michael Oskins** **Diane Vizine-Goetz**	187	Automated Title Page Cataloging: A Feasability Study
Patrick Doreian	205	On the Ranking of Psychological Journals
		Book Reviews
Marcia J. Bates	215	*Manual of Online Search Strategies* by C.J. Armstrong and J.A. Large (Eds.)
Thomas Childers	216	*Education of Library and Information Professionals: Present and Future Prospects* by Richard K. Gardner (Ed.)
Harold Borko	218	*Database Design for Information Retrieval: A Conceptual Approach* by R. Fidel
Karen Butter	219	*Public Access Microcomputers in Academic Libraries: The Mann Library Model at Cornell University* by H. Curtis (Ed.)
Pauline A. Cochrane	220	*The Future of Industrial Information Services; Proceedings of the Library Association Industrial Group 1987 Annual Study Weekend, High Wycombe* by L. Wood and R. Haigh (Eds.)
Harold Borko	220	*If You Want to Evaluate Your Library . . .* by F.W. Lancaster
Linda Z. T. Knowles	221	*Online Database Search Services Directory: A Reference and Referral Guide to More Than 1,700 Libraries, Information Firms, and Other Sources Providing Computerized Information Retrieval and Associated Services using Publicly Available Online Databases, 2nd ed.* by D.M. Maxfield (Ed.)
Ethel Auster	221	*Online Retrieval: Analysis and Strategy* by P.J. Vigil
Mathilde V. Rovelstad	222	*International Library Cooperation: Festschrift in Honour of Günther Pflug to His 65th Birthday/10th Anniversary Essen Symposium 19 October–22 October 1987* by A.H. Helal and J.W. Weiss (Eds.)
	I	Software Survey Section Apprentice-I

Vol. 25, No. 3, 1989

Ravi Sharma 223 A Generic Machine for Parallel Information Retrieval

Christine L. Borgman 237 All Users of Information Retrieval Systems Are Not Created Equal: An Exploration Into Individual Differences

Susan Gauch
John B. Smith 253 An Expert System for Searching in Full-Text

U. Güntzer
G. Jüttner
G. Seegmüller
F. Sarre 265 Automatic Thesaurus Construction by Machine Learning From Retrieval Sessions

Fazli Can
Esen A. Ozkarahan 275 Dynamic Cluster Maintenance

M.A. Bassiouni
Amar Mukherjee
N. Ranganathan 293 Enhancing Arithmetic and Tree-Based Coding

Charles V. Packer 307 Applying Row-Column Permutation to Matrix Representations of Large Citation Networks

Lieve Hamers
Yves Hemeryck
Guido Herweyers
Marc Janssen
Hans Keters
Ronald Rousseau
André Vanhoutte 315 Similarity Measures in Scientometric Research: The Jaccard Index Versus Salton's Cosine Formula

J. Švarc
A. Švarc 319 Application of the Cobb–Douglas Model to the Use of Information Resources by Industry in Croatia, Yugoslavia

Book Reviews

Clare Beghtol 333 *Subject Access to Visual Resources Collections: A Model for Computer Construction of Thematic Catalogs* by K. Markey

Naomi Sanger 334 *The Computational Analysis of English: A Corpus-Based Approach* by R. Garside, G. Leech and G. Sampson (Eds.)

Beth K. Eres 335 *The Information Society: An International Perspective* by R. L. Katz

Patsy Haley Stann 336 *Directory of Library and Information Professionals* by The American Library Association

Frederick J. Stielow	337	*The Basics of Information Technology* by J. Rowley
Richard V. Janke	338	*End User Searching: Services and Providers* by M. Kesselman and S.B. Watstein (Eds.)
Louis Vagianos	339	*The Communications Audit: A Guide for Managers* by A. Booth
Pauline A. Cochrane	340	*Thesaurus Construction: A Practical Manual* by J. Aitchinson and A. Gilchrist
Edward John Kazlauskas	340	*Information Systems: A Strategic Approach to Planning and Implementation* by R.M. Kesner
Patsy Haley Stann	341	*Encyclopedia of Information Systems and Services* by A. Lucas and A. Novallo (Eds.)
Jacki Becker	341	*Information Handling Techniques for the Office: Full Text Rules OA?* by S. Hills (Ed.)
	343	Announcement
	I	Software Survey Section

Vol. 25, No. 4, 1989

Tefko Saracevic	345	Editorial
Padmini Srinivasan	347	Intelligent Information Retrieval Using Rough Set Approximations
Peter Schäuble	363	Improving the Effectiveness of Retrieval Systems by Information Structures
Jean Tague **Ryan Schultz**	377	Evaluation of the User Interface in an Information Retrieval System: A Model
B.F. Peters **G. Philip** **F.J. Smith** **D. Crookes**	391	Online Searching Using Speech as a Man/Machine Interface
Carolyn L. Foss	407	Tools for Reading and Browsing Hypertext
Lisa F. Rau **Paul S. Jacobs** **Uri Zernik**	419	Information Extraction and Text Summarization Using Linguistic Knowledge Acquisition
Susan Bonzi **Elizabeth Liddy**	429	The Use of Anaphoric Resolution for Document Description in Information Retrieval
Moshe Telem	443	Managing Information Growth and Integration in Small Organizations

Book Reviews

Kevin McGarry 453 *Future Trends in Information Science and Technology: Proceedings of the Silver Jubilee Conference of the City University Department of Information Science* by P.A. Yates Mercer (Ed.)

Richard S. Marcus 454 *Knowledge Engineering: Expert Systems and Information Retrieval* by I. Wormell (Ed.)

George R. Thoma 456 *Optical Storage Technology 1988: A State of the Art Review* by W. Saffady

Evelyn H. Daniel 457 *Libraries in the '90's: What the Leaders Expect* by D.E. Riggs and G.A. Sabine

Robert M. Hayes 457 *Information Science: An Integrated View* by A. Debons, E. Horne and S. Cronenweth

Elizabeth S. Aversa 458 *Online Search Services in the Academic Library—Planning, Management and Operation* by J.M. Sieburth

Trudi Bellardo 459 *Going International: Librarians' Preparation Guide for a Work Experience/Job Change Abroad* by L.E. Williamson

Elizabeth S. Aversa 460 *Thesauri Used in Online Databases: An Analytical Guide* by L.M. Chan and R. Pollard

Pauline A. Cochrane 461 *Low Budget Librarianship: Managing Information in Developing Countries* by W.G. McD. Partridge

C.D. Hurt 461 *Forms for Library Automated Systems: An Illustrated Guide for Selection, Design & Use* by L.M. Kershner

Mary Lynn Hale 462 *Computer-Readable Databases: A Directory and Data Sourcebook* by K.Y. Marcaccio (Ed.) and M.E. Williams (Founding Ed.)

Bob Usherwood 463 *Charging for Library Information Services* by B. Norton

I Software Survey Section

Vol. 25, No. 5, 1989

A. Bookstein 465 Set-Oriented Retrieval

Jianyun Nie 477 An Information Retrieval Model Based on Modal Logic

Norbert Fuhr **Hubert Hüther**	493	Optimum Probability Estimation from Empirical Distributions
Hilary D. Burton	509	The Livermore Intelligent Gateway: An Integrated Information Processing Environment
Hideki Nishimoto **Shoji Ura**	515	Complex View Support for a Library Database System
Ye-Sho Chen	527	Analysis of Lotka's Law: The Simon–Yule Approach
D.N.J. Mostert **J.H.P. Eloff** **S.H. von Solms**	545	A Methodology for Measuring User Satisfaction
Ravinder Nath	557	Are Frequent Computer Users More Satisfied?
Matthew J. Liberatore **George J. Titus** **Michael W. Varano** **Paul W. Dixon**	563	An Experimental Investigation of the Effects of Some Information System Design Variables on Performance, Preference, and Learning
		Brief Communication
James Christopher Westland	579	A Net Benefits Approach to Measuring Retrieval Performance
		Opinion Paper
Roberto Refinetti	583	Information Processing as a Central Issue in Philosophy of Science
		Book Reviews
J.A. Large	585	*New Horizons for the Information Profession: Meeting the Challenge of Change. Proceedings of the Annual Conference of the Institute of Information Scientists, University of Warwick, 1987* by H. Dyer and G. Tseng (Eds.)
Samuel T. Waters	586	*Readings in Distributed Artificial Intelligence* by A.H. Bond and L. Gasser (Eds.)
Herbert S. White	586	*Library Services in Theory and Context* by M.K. Buckland
Lawrence W.S. Auld	587	*Microcomputer Software for Performing Statistical Analysis: A Handbook Supporting Library Decision Making* by P. Hernon and J.V. Richardson (Eds.)
Michael S. Nilan	589	*Information Research: Research Methods in Library and Information Science* by N. Tudor-Silovic and I. Mihel (Eds.)

Neal Oliver 590 *Machine Translation: Linguistic Characteristics of MT Systems and General Methodology of Evaluation* by J. Lehrberger and L. Bourbeau

Roger R. Flynn 592 *People and Computers: How to Evaluate Your Company's New Technology* by C. Clegg *et al.*

Sheilia S. Intner 593 *Cataloging Microcoputer Software: A Manual to Accompany AACR 2 Chapter 9, Computer Files* by N.B. Olson

Robert D. Stueart 594 *Library School Closings: Four Case Studies* by M. Paris

Ronald R. Powell 594 *Basic Statistics for Librarians, 3rd Ed.* by I.S. Simpson

597 Announcement

I Software Survey Section

Vol. 25, No. 6, 1989

W.B. Croft
T.J. Lucia
J. Cringean
P. Willett 599 Retrieving Documents by Plausible Inference: An Experimental Study

M. Créhange
O. Foucaut
G. Halin
N. Mouaddib
J.F. Foucaut 615 Semantics of User Interface for Image Retrieval: Possibility Theory and Learning Techniques

Michael D. Gordon
James P. Fry 629 Novel Applications of Information Retrieval to the Storage and Management of Computer Models

Fathi Debili
Christian Fluhr
Pierre Radasoa 647 About Reformulation in Full-Text IRS

Fred J. Damerau
Eric Mays 659 An Examination of Undetected Typing Errors

Karen E. Lochbaum
Lynn A. Streeter 665 Comparing and Combining the Effectiveness of Latent Semantic Indexing and the Ordinary Vector Space Model for Information Retrieval

Lorna K. Rees-Potter 677 Dynamic Thesaural Systems: A Bibliometric Study of Terminological and Conceptual Change in Sociology and Economics with Application to the Design of Dynamic Thesaural Systems

Bogdan Trawiński	693	A Methodology for Writing Problem Structured Abstracts
Keith G. Jeffery **Judy O. Lay** **Jean-Francois Miquel** **Samir Zardan** **Fulvio Naldi** **Ilaria Vannini Parenti**	703	IDEAS: A System for International Data Exchange and Access for Science
Ljerka Zmaić **Siniša Maričić** **Vladimir Simeon**	713	Visibility of Peripheral Journals Through the Science Citation Index
Ronald Rousseau	721	Constraint Propagation Applied to Citation Analysis: An Example
Jamshid Beheshti	727	A Cross-Sectional Study of the Use of Library Books by Undergraduate Students
Jamshid Beheshti	737	A Longitudinal Study of the Use of Library Books by Undergraduate Students
		Book Reviews
W.B. Croft	745	*Readings in Artificial Intelligence and Databases* by J. Mylopoulos and M. Brodie (Eds.)
Deborah Ozga	745	*First Stop: The Master Index to Subject Encyclopedias* by J. Ryan (Ed.)
Keith M. Cottam	746	*Managing Change: A How-To-Do-It Manual for Planning, Implementing, and Evaluating Change in Libraries* by S.C. Curzon
Bor-sheng Tsai	747	*Using Lotus 1-2-3: A How-To-Do-It Manual for Library Applications* by R. Machalow
George S. Bobinski	748	*Colleges, Learning and Libraries: The Future* by P.J. Pack and F.M. Pack
Michael H. Harris	748	*Librarians in Search of Science and Identity: The Elusive Profession* by G.E. Bennett
Marianne Broadbent	749	*Resource Allocation in Industrial and Commercial Libraries: Optimising New Technology and New Services* by L. Wood (Ed.)
	I	List of Contents and Author Index
	XIII	Software Survey Section